

IN THE CLAIMS:

Please ADD new claim 40, as follows. For the Examiner's convenience, all claims currently pending in this application have been reproduced below:

1-25. (Cancelled)

26. (Previously Presented) An exposure apparatus for exposing a substrate with a pattern of an original, said apparatus comprising:

a housing filled with a predetermined ambience, for accommodating therein at least a portion of a light path of exposure light;

a reflecting member disposed in said housing; and

a laser interferometer having a light source and a light receiving element for receiving light from the light source after being reflected by said reflecting member, wherein at least one of the light source and the light receiving element is disposed outside said housing.

27. (Previously Presented) An apparatus according to claim 26, further comprising a projection lens for projecting the pattern of the original onto the substrate, wherein said housing is effective to close one of (i) a space below the projection lens and accommodating the substrate therein and (ii) a space above the projection lens and accommodating the original therein.

28. (Previously Presented) An apparatus according to claim 26, further comprising a pressure reducing mechanism for applying a vacuum to said housing.

29. (Previously Presented) An apparatus according to claim 26, further comprising a window provided at an interface between the inside and outside of said housing, for transmitting light from said laser interferometer therethrough.

30. (Previously Presented) An apparatus according to claim 26, wherein an oxygen concentration in said housing is maintained at not greater than 10 ppm.

31. (Previously Presented) An apparatus according to claim 26, further comprising a gas introducing mechanism for introducing an inactive gas into said housing.

32. (Previously Presented) An apparatus according to claim 26, wherein one of nitrogen and helium is introduced into said housing.

33. (Previously Presented) An apparatus according to claim 26, wherein light to be used for the exposure is laser light having a wavelength not greater than 248 nm.

34. (Previously Presented) An exposure apparatus for exposing a substrate with a pattern of an original, said apparatus comprising:

a housing filled with a predetermined ambience, for accommodating therein at least a portion of a light path of exposure light;

a detection system having an optical system, wherein a portion of a light path of said detection system is disposed in said housing while at least a portion of the light path of said detection system including an electrical element thereof is disposed outside said housing; and
a laser interferometer disposed outside said housing.

35. (Previously Presented) An apparatus according to claim 34, wherein said detection system is a detection system for executing focus adjustment of the substrate.

36. (Previously Presented) An apparatus according to claim 35, wherein the electrical element is one of a light source and a light receiving element.

37. (Previously Presented) An apparatus according to claim 34, wherein said detection system is a detection system for executing positional alignment between the original and the substrate.

38. (Previously Presented) A device manufacturing method, comprising the steps of:
exposing a substrate with a pattern of an original by use of an exposure apparatus;
and
developing the substrate after the exposure,

wherein the exposure apparatus includes (i) a housing filled with a predetermined ambience, for accommodating therein at least a portion of a light path of exposure light, (ii) a reflecting member disposed in the housing, and (iii) a laser interferometer having a light source and a light receiving element for receiving light from the light source after being reflected by the reflecting member, and wherein at least one of the light source and the light receiving element is disposed outside the housing.

39. (Previously Presented) An exposure apparatus for exposing a substrate with a pattern of an original, said apparatus comprising:

a housing, filled with a predetermined ambience different from an atmospheric state, for accommodating therein at least a portion of a light path of exposure light; and

a detection system including (i) a light source, (ii) a light receiving element for receiving light from the light source, and (iii) an optical system for directing light from the light source to the light receiving element,

wherein a portion of a light path of said optical system is disposed in a first space enclosed by said housing, at least one of the light source and the light receiving element is disposed in a second space outside said housing, and the second space is filled with a predetermined ambience different from the atmospheric state.

40. (New) An exposure apparatus for exposing a substrate with a pattern of an original, said apparatus comprising:

a housing, filled with a predetermined ambience, for accommodating therein at least a portion of a light path of exposure light; and

a detection system for executing focus adjustment of the substrate, wherein a portion of a light path of said detection system is disposed in said housing while at least a portion of the light path of said detection system including an electrical element thereof is disposed outside said housing.